1967

UNITED STATES
DEPARTMENT OF THE INTERIOR

DI-6

APPROVED DECEMBER 1966

1 LORING = 5.7'

671

JUNE 9
1967.

WHITE BUTTE IN STARK CO

PARTLY CLDY TEMP. 60'S

AT ORIG. FIND SITES OF
U. IMBR FLORA 4 FT.
4 BOVE H.S 2 ONC.

COLL. PLS.

PLS. NO. 671

ITASCA

MAPLE BASSWOOD
following
WHITE PINE

Hab. Carex richardsonii
Pinus
Basswood
Sug MAPLE

1 Carex richardsonii
char. of woodland

2 C pennsylvanica

3. Brachyelytrum
Char grass
grows in tufts
reddish scaley rhizomes

Barchiella erir

Galium triflorum

Anemonine ?

Osmorhiza

Aster macrophyllus

Basswood seedlings

Smilax

Dirca a shrub
leather wood
Thymelliaceae

Cornus alternifolia

4 Chiogachne purpurascens
Grass
Drooping
Closed leaf sheath
with purple
seal streak

5. Oryzopsis asperifolia

Acer Shrub Acer
Spicatum.
Paper birch
Aspen

White pines
Old Large
trees

No V. Alnifolium.

Sanicula
Sugar maple
Hop hornbeam

As west forest height decreases

Shade intolerant spp.
pine
Asp.
birch
have their crowns
above tolerant
Sug Map Basswood

Vidia pubescens
V. rugosa

Ostrya
Sug Map
Basswood
} strong reproc

EAST side of LAKE ITASCA

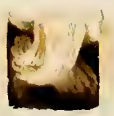
JACK PINE
RED PINE } INITIATED BY fires.

SUCC. TO MAPLE BASSW.

OTHER: MAPLE BASSWOOD
for
MORE ELM.

RT. 113 TO NAUBUN
JUST W. of PARK
ITASCA MORAINE.

McAndrews (1966) 1966
STUDIED
BOG SERIES
TO PRAIRIE
MARSH
MEM. of TORREY BOT
CLUB.



June 13th. WITH
Dr. & Mrs. Bell

1st St. Spruce fur fur. Alex Grant.
26 Sync & Dick Loring.

2nd. Open SAVANNAH fur
Hard Wood.
Oak
Elm

Top. BLANKET CHANGE
Suddenly
If Ch. of Tr from
SANCTUARIES.
WESTWARD.
JACK pine
Red & White
Aspen
Paper Birch.

1 Tr of Fires
IN this Area
All through re[illegible]
ISLANDS of
Hard woods.

Road to Wabora

Conifer forest
w. to
near. White
Fish Lake

Thin maple - Bass wood.

Paper Birch ~~Forest~~
Trees dirty
grey bark.

Mc Kinney Lake
End of
conifers.
Jack Pine
Lh. pine

mostly oaks

White Pines

Good Conifer Podsol

Yell.
Cirpis
Lycopsis hispida

6 Populus Balsimifera

MONTANE AT
MC CLANCY LAKE

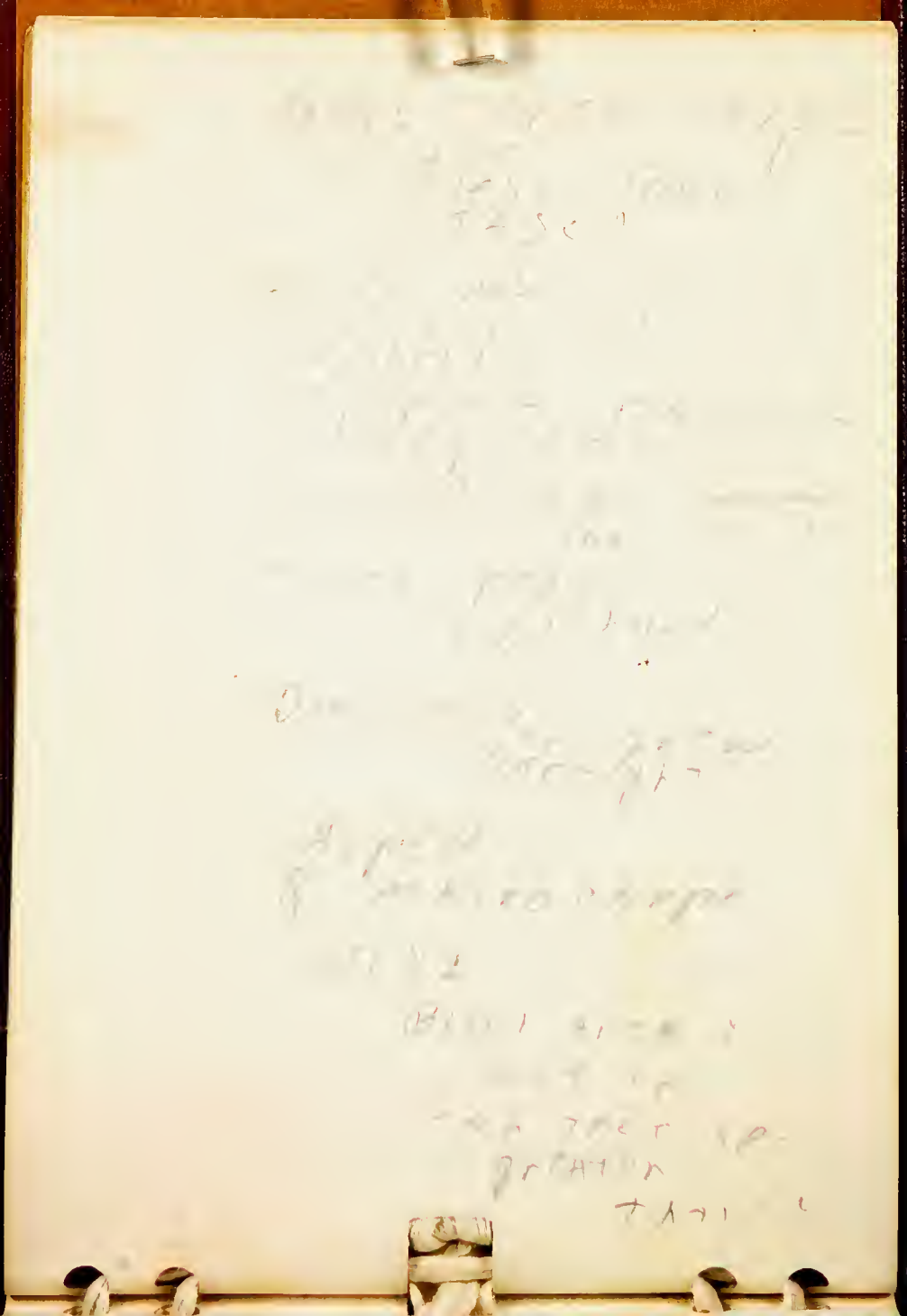
7. Artemisia ... Chrysothamnum ... CAUDATA.

WEST. ... CAVE
... MAPLE ... WOOD
... ENTIRE
MAPLE BASSWOOD
ELM, ASPEN, GREEN
ASH, PAPER BIRCH

Western most stand of Miss[issippi] ...
... MAPLE ... WOOD
FOREST
ON DRIVE SAW
FOREST MOVED
OUT OWNED IT
LAST 150 YRS AGO

... 10 ...
... HEART ...
... ROOTS
THE
FOREST ...

Low Hilly and gently undulating
W½ sec 17, T14SN, R14W, S. of Yukon in Oklahoma



8 RIBES SINOSBITUM.

9 ARALIA RACEMOSA
DC. NUTT.

10 POLYGONATUM biflorum

11 UVULARIA grandiflora Sm.

12 STREPTOPUS roseus

13 LONICERA dioica

14. CIRCEA alpina L.

[illegible]

ACER SPICATUM

[illegible] sp. no rhizomes

[illegible] Aralia
drummondii
racemosa (L.)
Desf.

19 [illegible]

18 [illegible]

[illegible]

6 TALL GRASS PRAIRIE & MESIC ~~MESIC~~ ~~DRY~~

X 22 ZIZIA APTERA
Zizia aptera

KOELERIA CRISTATA,
ELYMUS ~~SPARTEA~~ CANADENSIS
Andropogon Scoparius.

23. ~~SISYRIN~~ CHIUM

24 ASTRAGALUS CRASSICARPUS

25 NOLATHRUS VENOSUS
26. ORAIS VIOLACEA
28 CAREX

27. LOUSEWORT Pedicularis canadensis L
GALIUM
ZIGADENUS ELEGANS

29. CASTILLEJA SESSILIFLORA

30 SMILACINA RACEMOSA

31. THALICTRUM
32. COMMANDRA PALLIDA
33. LITHOSPERMUM CANESCENS (Michx) Lehm.
34. VIOLA PEDATA

32.

PETALOSTEMON CAN

SYMPHORICARPOS ORB.
ANTHEMIDE PURSH.

35 AGOSERIS GLAUCA (Pursh) Dietr.
36 ANEMONE CANADENSIS
37 VICIA AMERICANA
38. PURPLE PEA. - VICIA
39 ARTEMISIA
40 HYPOXIS
41. SENECIO.

---

42 SENECIO Lower Slope NEAR PINE
43 POLYGALA SENEGA Senega
44. ASCLEPIAS
45. APOCYNUM CANNABINUM.

---

46 TOP. OF HILL.

↘ WHITE BLUE EYED GRASS.
NEAR TOP of HILL.

47. GEUM
48. ASTRAGALUS. SP

49. Erigeron strigosus
Hill Top.
with Bouteloua

50 Koeleria cristata

Corylus Americana

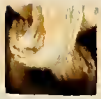
Boardwalk of Q. macrocarpa

51. Corylus Americana

52. Prunus pennsylvanica
leaves in Ax.

53 P. serotina

Also.



STOP 7.

Mesic Prairie
NEAR WAUBUN

Sorgastrum nutans.

54 Salix humulis

margin of OAK woods
Symph. orb

55. Rhus g/x p.

P. serotina

56 Smilax herbacea
Omacr herbacea

57 Apocynum androsemufolium

Phryma (hopseed)

58. Ribes hirtellum.

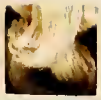
→ Amorpha canescens.
Parthenocissus quinq.

Parthenosis / VITACEA

60 Hemp

61. P. virginiana

62. Rubus strigosus

IN OAK FOREST  UNDER DAM

63 Rhamnus.

Acer negundo
Sm

64 Thalictrum Masycarpum

~~65~~. Tr. Ilium.

65 Ribes

66 V. burnum affine

67 Vulvaria sessilifolia
Aster macrophyllus
Carex pennsylv.

68 Zizizea aurea ?

69 Sanicula grey...

70 Aralia

71 Geum GALLIUM

72 Cornus racemosa

73 Blue Conish
Thryma leptostachia

74 Milanthemum canadense

75 Trillium

76 Cornus ~~rugosa~~ ?

77 ~~Hydrophyllum~~ L. Vn

78 Hydrophyll

79 Liatkris Scoluica
Lathyrus palustris L.

80 Rubus pubescens
SANICULA

~~ATAT~~
81 LATHRUS DECOLL.
82 ACTEA rub.

83 Aquilegia Canad
Corvus Alterna
Taraxinus Penn.
Polygonatum
~~Smilacina~~
CIRSIUM A.

84. Amelanchier humilis
85 Ozola secunda ✓
86 STEPTOPUS

Fragaria americana
Terminal
Lobe small
between
BOTRYCHIUM

PRAIRIE marg
glyceria

STOP 6.
Wet Prairie
W. of Wabun

TARAXICUM.
ZIZEA APTERA
Z. AUREA

MIMA mounds
built at margin
of gopher
Cypripedium parviflorum
47 Sisyrinchium
Sorghastrum nutans
Solidago altissimum?

MIMA mounds.
weedy
Annual Sunflower
Helianthus
Symphoricarpos
occ. pyctensis
Monarda fistulosa
MIMA mds of Wash
Sci
& Bio Sci.

Anemone

(9)

Jens T. C. Braa
Trondheim Bluff.

SW, Sec 18, T 143 N, R 43 W
w. of 5th mer
e of Fgn

STIPA COMATA

89. Lithospermum incisum.

Koeleria cristata
Ammann

90 Arenaria ? plenn. ?

91. Cerastium ?

Boutelova gracilis Dom.
Oenothera serrulata

92 Pensteman gracilans
93 Heuchera ?
Viola pedata
94. Pasque flower Anem.
Antennaria ?

Artemisia frigida.

Indicators sps.
Boutelova.

95. Antennaria

96 Senecio

Brauneria angustifolia

Thicket

Hawthorn
Corylus
[illegible]
97 Vib. lentago
98 Crataegus succulenta
Ulmus

Prairie.
Commandra.
99 Juniperus Communis

Thicket
Choke Cherry
Symphoricarpus
100 Meadow sweet Spiraea
101 Ranunculus sp
102 Asclepias

103 Ane/Anchier scirpoidea Michx

104. CAREX ~~filifolia~~ ? ? subsp. scirpoidea from. Shor ?

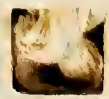
105. PANICUM. SP.

106 Agoseris

107 Four O'Clock ~~Mirabilis hirsuta~~ Oxybaphus occidentale

108 ~~Artemisia~~ Petalostemum white

⊗



10 Gallery Forest along Wild Rice Riv.

Eastern Cottonwood,
Tilia
Salix amygdaloides,
Acer negundo

Sh

Ulmus americ

109. Stellaria longifolia,
110 Caricaminc sp
Parthenocissus
Symp. orb.

111 Viola rugulosa

~~Xanthoxylon~~

112 Xanthoxylon Canad
Astragalus
Rhus glab

Upper Slope Bur Oak

113 Menispermum
Anemone canadensis
Balsam [illegible]
Leptostachys
Smilax herb
Solanum
Sanguinaria [illegible]
Rhus glab
Pilaus [illegible]
Dr Thomson's [illegible]
Hirsch leum Maculatum
Flavus [illegible]
Vib. lentago

671 White Butte - June 17

Plants from Roadside

114. Capsella type mustard from short grass prairie.

115 White fl. (Roadside) mustard.

116 Yellow mustard.

117 Lappula

118 Large flat pad white fl. mustard.

Killdeer June. 18

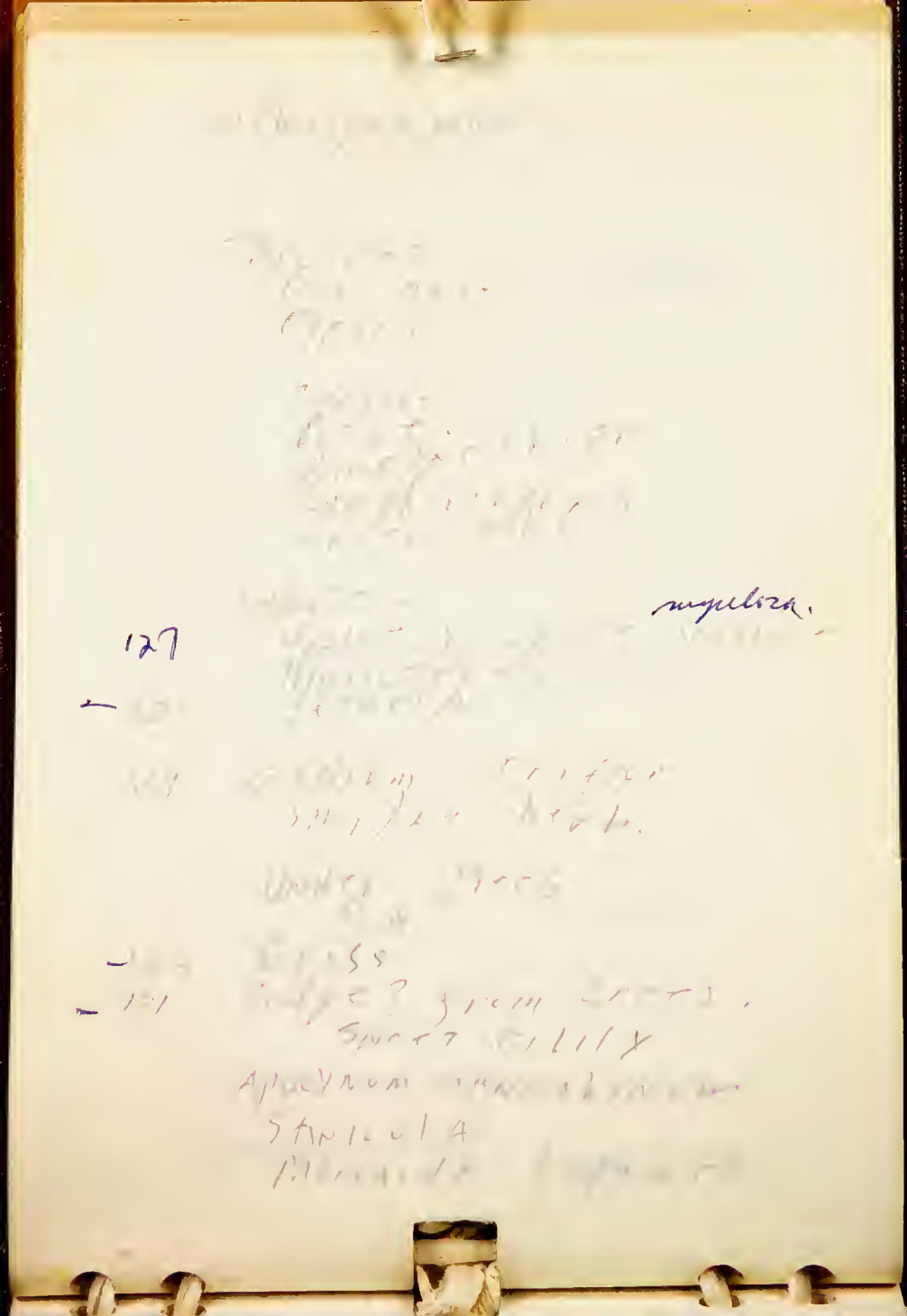
Prairie at Lower

Artemisia ludoviciana

Cirsium (common)

Prairie June grass

Erigeron



June 18

TALL Type. Wet Prairie (1)

136.5. Senecio Interrigimus.

Viola nuttallii

Thalictrum arvense

Petals blue.

Penstemon subulatus

June 18

Stop 4 Upper prairie

* Stipa viridula Trin
Pasture flowers.
Strdaria x.
Arabis holboellii

June 18

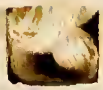
Sess. flora.

band

alnifolia

Ranunculus abortivus
Sedge

165



JUNE 18

pallida

June 18.

Carol sporogeli

2

C. deplexa

JUNE 13.

from beaver dam.

V. ola papilionacea
β macounii
Cardamine bulbosa
on drift & pulpy in mud

Carex hystericina Muhl. ex Willd.

on stream

amenum
Salix bebbiana.
from beaver dam.
vinulosum

road

C. interior L. P.S.

behind beaver dam

Stems erect & rigid.

June 17

2-23-2

NW, NW, Sec. 33 T 140N, R 94W

E. STARK Co.

June 17

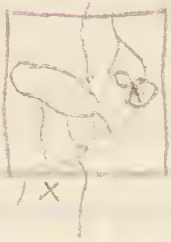
TURTLE VALLEY

208 Prairie Margin

June 20

Loc 673

Sec. 27, T 142N, R 94W.
Dunn Co.



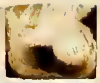
673 1-2 feet above
AB lignite
Sapindus
Mesophyllum
Salvinia
Platanus nobilis
Alnus
Others

673 AB. Lignite
AB Lig for
pollen anal.

JUNE 20

47 Loc. 7-16-1

209(225) Yellow Compress.



LOC. 674 June 23, 1967

Loc. MM Revis-
e grey zone.

210 RA from prairie
to T 7

211 Mo ST Hwy Roadside.

LOC, 675 JUNE 26 FAIR & WARM.
Big Horn Coal Co,
NE Sec. 22, T57N, R84W.
CENTRAL SHERIDAN Co.

MINES IN MONARCH SEAM
of FORT UNION COAL Gp.

Up 2 75' of SCORIA.

Mr. John Ritchie
Chief Engineer No fossil
plants exc. LOG AT
Top of Coal seam.

675-1 Monarch Coal from
Monarch Mine, near Acme
Wyo

212 [illegible]

213 Bromus [illegible]

LOC. 676 | Center Sec 25, T57N, R84W. 1/26

Top of Hill Above Roland Coal
Capped with highly
fossiliferous (comparing INV.)
bearing SS WY
6
Samp. 676-1

Top of F.V. in
Spotted Horse ?

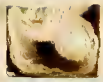
314. Storage from Sage Brush Prair

from Roland Coal ? To
fossil Mollusk Bed is 10.2'

5.7
4.5
10.2

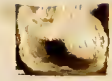
Coal in Top of Bluffs. ___ Thick 10

Coal in mid. of Bluffs
well exp, Roland ? ___ 17' Th.
Layer of fossils.

676.  6/26

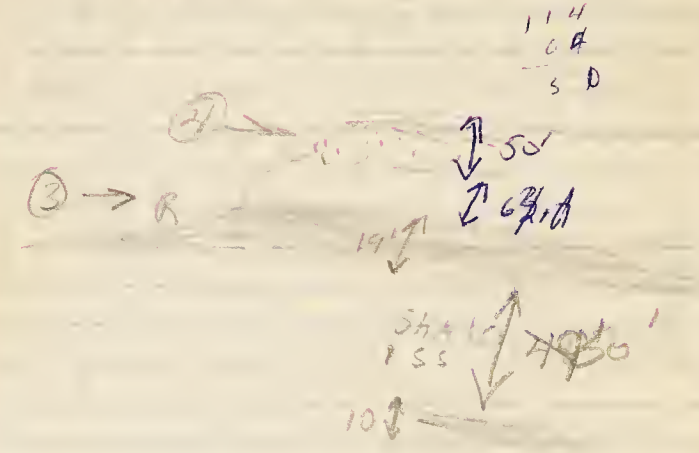
215. Thistle with wh- fls
Drainageway

216. Annual Bromie from Prairie.



DC 677 NE, Sec 11, T 56 N, R 85 W.
C. Sheridan Co, Wyo.

Escarpment of



216 Mustang Bare Shale Slope

3 Roland red
Calc blowin st.
Lign. stringers

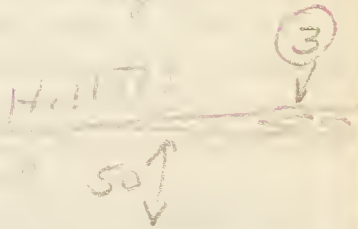
4 Mottled Tan 10 ft.
ss.

June 27

Loc 678 SW, NW, Sec. 3, T 54 N
R 83 W, C Sheridan Co.
[sick] Pt. Cldy & Humid.

Coal And Scoria in
The Intermediate
Coal Sp

Scoria from 50' Exp.
Capps Hill



218 Well Shaft

(3) Exp of Shell [illegible]
[illegible]
Just Same Layer as at (2)
which is at least 60'
-lower

LOC 07. C. Sec. 14, T 5 N R 3 W. 6/27

211 Purple fl. (Bor[illegible]) Kenk House

Concrete with scenic AT BASE and Top of 180' Hill mostly covered.

Lower Ulm [illegible]

[illegible]

Base of Ulm 200' A[illegible] 40 ft. above top of col

6/27

20c.6710 SW SW Sec. 11, T 54N, R 83W

Scoria NOT 42' T.O.A.!
Pattern of fossils

20c.6711 1. Ulm.
SW¼ Sec 11, T 54N, R 83W.
Scoria is 82' thick capped
Base of 1 Ulm
1½ ft above
Top of Scoria in 6710
Metasequoia occident.
in sc 1 — 10' below
Ulm scoria
Cercidiphyllum
in shales of
scoria

6711-1 Fossils from Ulm
Coal @ top of Scoria
Ulm 2 Coal
10 - 25 ft above
1T.

Loc C712

June 29, 1907

C, N, Sec 20 & S C Sec 19
T 54 N, R 82 W, C Sheridan Co.

220 Yell. MUSTARD growing in ridge top
221 SAME HABITAT.
222 SAME
223 PRAIRIE
224 LUPINE

Loc. 6712

S. facing slope

225. Yell comp. with Latex s. sh
226 Same.
227 Mariposa lily
228 Sandy W. facing slop.
229. Composite Same h " 228.
230 Psoralea

S.J. = Lonsdale

Loc. 6313

JUNC 27 107

NW, SEC. 21, T 57 N, R 78 W
E. Sheridan Co.

SECTION Through Int. Gp
from ____ Probably Coal
Through several ~~Th~~ Local

0 NEAR RGH

BASE OF [illegible]
[illegible] to JAN

~~4315~~ Shale partings.

92 Felix Lignite
6713-1 Sample of Felix
Lig. for Bullen

10.2-11.5' Lignitic micaceous shale.
Brown papery
Monocot frags

LOCAL
12 L. [illegible]

1HL. [illegible]
LOCALO 2
Lenses of Lig. Map Sh.
IN FLAT AT 15K.
→6713-2
Silicified Lignite

Loc.
6713
(cont.)

192 Top of Local Ls.

231 — Purple pea from Sand
Art. Tell.
STJPA Com

235 Shales & Lignite

234 Shales

235 Sandstone

236 Lignite

236.6 Lignite (Loc 24)

364 Shales

Sandy

401 Lignite

Local Ls

42.34 SS with Loc. ly Inocs
414 SS.

417.3 Top of Hill Inocs

233. S. facing slope of hill.

234 Shrub. on S. slope

235. Perennial Aster.

Samp 6 7 R. – 3

AT. 4 5 L.

Shales with
Metasequoia.
Platanus.
Cacyn.

Loc 6714 NE, Sec. 3, T6N, R10W.
E. Sheridan Co.

FV. SS Below Roland

Xbedded coal, Sub
[illegible] Arenite, Sub
[illegible] ft to [illegible]
[illegible] range [illegible]

Sams 6714-1 Roland coal
25 ft below
Shell bed marine
Contact of FV & WAS.

Samp 6714-2
Ly. in Intermediate Scr.
25' Ly. in FV.

Well. June 30, 1967
Loc. 6715 Horse Creek Butte.
Center Sec. 20, T 54 N, R
74 W. Sec. on NE side of
Butte. N ¼ Campbell Co.

~~SS. Base~~
Then
6715-1 Felix Lignite

from Local Lignite
Bet Felix & Scott

Monocots
Metasequoia
Equisetum

236 Mossy Overburden from base
Sandy Butte Sl.

6715-2 "HS" Like Layer caps
lignite layer 1½ thick
2' below base of ¼ Scott

6715-3 Scott Lignite

237 White Umbelliferite on Scoria
Cap. of Butte

6715-4 Fossil Leaves in scoria
above Ulm 2.

Loc. 6716 Custer Co. June 30
Sec. 33, T54N, R74W
N½ Campbell Co.

Felix Scoria
Sandy interval
with snix & rare
monocots & annuals.

Cercidiphyllum

238 Penstemon grandiflorus.

239 Agropiron in clump on
Bare Scoria slope.

240 Poa on scoria slope.

July

Loc 677 Elm 2 scoria cone in NE, SW, Sec. 9 T 35N R 7W, [illegible]

scoria w/ TA [illegible]

241 Scoria Slope Senecio
242 White Pea Scoria Slope

Loc. 678 Elm 2 Scoria cone in NE SE, NW, Sec 9 T 35N, R 7W,

Loc. 679 NW, SW, SW, Sec 17, T 35N R 7W, on old [illegible] SE.

F.U. SS. below Scoria [illegible]

Pint Nob + scoria

202.6720 NW, SE, sec 30, T 50N, R 82W
NW¼ Johnson County, Iowa.

Bedrock Brown loc in
Kingsbury Congl. No fossils found

243 Grows in shrubby place on R. ridge - slope
244 MANZANITA covers upper part of Kingsbury ridge.
245 Rice grass. in mine.

MARL in Congl.
246 GRASS DIOPSIDUS
247. FLEA BANE.
248. LAPPULA SAME as from summit prairie.
S. CONVERTA.
HYPERICUM.
KOELERIA
BOUTELOUA GRAC.
THR. LEAF SEDGE.
249 MUSTARD.
250. COMPOSITE
251. LILLY from tuber.

252 Hymeno.
253 Senecio.
254 Crassula.

US 14 ON EAST FACE of Bighorns. July 3

255. Monocot Zigadenus
256 M. DANDY June
257 Bibes.
258 PPA from SUMMIT.

Loc 6721 SW sec 6 July 5 6
USNM Sec. 6 T 8S R 21E.
14154 South of Smith mine
S. across road.

STRIP mine IN. No 1 COAL.

Good Coal
Prob. COAL 1

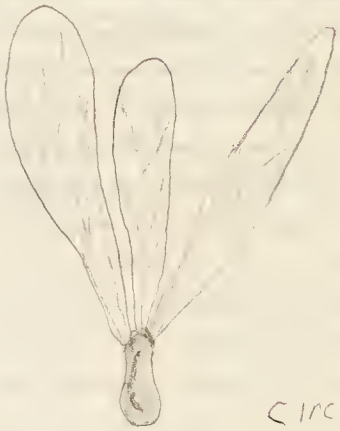
Loc. 6721-1 Lignite 1 FAM 2' above
fossil LAYER.

USNM 14155 SE of 6721
Loc. 6722. July 5
No. 1 COAL.

COAL 1 STRIPPED
mine

Dorf's collection from
Just Above No. 3 Coal
Near Renwyck Eagle Mine.
SW, Sec. 8, T 8 S, R 21 E

Loc. 6721



CIRCA 2X

6223

July 10th. Clear Warm.
SE, NW, sec. 30, T 57 N, R
101 W., Park Wyo.
by Mrs. Thelma Churchill.

USNM
14156

by Jep

Leaves of Paleocene Age
from silt stone
mapped as F.U. by
Pierce.
Near top of F.U.
Jepsen finds verts.
of Paleo or Eoc. Aspect
with Sl. more pref
for Eoc.
Dk. sumber grey
micaceous silts &
shales
X bedded calc.
Minor weathering
calc. conc.

July 14

Loc. 6724
USNM.
14157

In Upper LANCE 50-60 ft
Above LANCE
NE, SE, Sec. 20, T6N, R 1E.

Above ~~2~~ Highest coals
by 30-60 ft
Carb Sh., Sil SS, ?
Sandstone interbeds

30-50 ft Above
Well-rnd pebble
Cong. which is
3 inches in U. LANCE
Sec 15 ft/pin

July 15

6725-1
USNM
14158

Center NE, SE, Sec. 20, T6N R1E
IN UNIT 184 of Keefer's
Sec. 4 (USGS 1175 @ 75)

259. MUSTARD on Hillside
260 Grass Assoc. on Hillsn
261 Grass dom. on slope.

6725-2
USNM
14159

SW¼, Sec. 21, T6N, R1E.
AT. Merriam TRIANG
POINT.
AT. UNIT 189 of Keefer
USGS Bull 1175 P 74

262 FLAT in Sec 21

263 FLAT
264 "
265 "
266 "
267 Low Shrub
268 FLAT
269 WITH SAGE brush
270 Hillside SW dry prairie Sec. 32
271 STIPA on flat slope stu
272 Lark spur at Lybian end
273 DANTHONIA? Gentle Bare Slope
274 Q. with stipt & Lupin
275 Oryzopsis same as 272
276 Chenopod - Coulter FLAT
Agropyron forms tufts Contact

July 16, 1967

Loc. 726 NE, NW, Sec. 27, T 6 N
USNM R 1 E, Shotgun Butte, Fremont
14160 Co., Wyo.

Silt and at base of cliff
in the shotgun mbr. of
F. V. Fm.
Metasequoia occ.
Hydromystria rare
Cercidiphyllum rare
Plat. N. gracilis

282 Gaura from ditch on flat
283 Yell. composite from clay flat.
284 White composite from flat
285 Stipa from flat
286 Yellow umbellifer from upper cone of Shotgun Butte SW of the stock
287 Danthonia - Top of S. G Butt

Loc. 6727 Shotgun Butte
Indian pictographs from
vertically oriented sandstone
white bluff ss
Conglomerate ss

288. Shaded BANK under L. L. Cott
289. Large leaf COTTONWOOD.
290 with RYE GIANT R. P. Ant
~~291~~

8/17

Loc. 6528 3 mi N.E. of Bonneville.

All from flat

291 Opuntia A.
292 Chenopod.
293 Helianthus Single slope
294 Wild Rye Elymus flat.
~~295 Grass Wood. Slope Helianthus~~
~~296 Ly~~
295. Lappula A flat.
298 Sarcobatus Slope

Loc. NE¼ Sec. 5, T38N, R93W.
Silty to sandy
Dry section
of Wind River Fm.
No pl's. or pl. remains
found.

297 Borage. flat
298. Evening Primrose.
~~299.~~ Solanaceous pl. flat.
300 Helianthus by road.
301 Flashy Chenopod. } flat
302 Stipa
303 Yellow Bee Plant 1 mile NW of Bonneville.

JUNE 23

310 LYSIMACHIA CILIATA
long rhizomes.
Birch Asp Cultee woods

311 [illegible]

312. MADDER POCK. SMILACINA

313 Mertensia from Sluggish Pocket

315 Bunge St. Fl.

317 Agrimony Dell fb in Relay Inv
Asp. & Birch for.

318 moss from under Asp. & Birch
Corylus woods.

Plants in mid slope.

~~Anthoxanthum~~
Bromus ORIA
Festuca
STIPA COMATA Bom.
Carex filifolia.

Inv. from edges
by Corylus.
Populus Tremul.
Choke Cherry

Cystopteris Bract on small Bracken
drier at Deep Creek Pocket

319. WATER POCKET from
Birch Bog

320 Muskeg in Bog
321 [illegible]

STIPA SPARTACA on
woods margins
[illegible]

322 STIPA SPARTACA
in Rim rock
AT no 6.

~~Summit prairie~~
Andropogon scop. on
Slope pr.
STIPA SPART IN RR.

Summit pr.
323 Agrop. rep Sp Assoc.
Koeleria dom.
STIPA COMATA dom.
[illegible]
CAREX filifolia com.
Agropyron Smithii impr.
Andropogon scop on slope

July 21

67 Much oak with Elm
P. birch & Asp.
R birch asp with
with Maple
Heavy Oak
+ Elm
Mod Corylus, Ch. [illegible]
Rosa sp. Crataegus
[illegible]
[illegible]

68 Rich woods
P B Asp Some
Ch Ash
Grey Dogwood sh.
Willows.

32H Margin of Rich woods.
Thistle.
Taller woods Mary
326 Herb 3½ feet.
327 Willow from swampy area
near road.

Oaks at opening 20-30'

Bilberry [illegible]

(3) Prairie

Stipa comata

Koeleria

Andropogon

Bouteloua

Bromus

Poa

Agropyron

Artemisia

(9) Thicket of Bullberry

Symphoricarpos

Amelanchier

Rosa

Rhus

Rim rock & prairie below

Juniperus

Stipa

Bromus

Agropyron

Poa

Koeleria

Artemisia

Sphaeralcea

Geum

Aster

Erigeron

Eriogonum

Lomatium

Phlox

Penstemon

Delphinium

Balsamorhiza

Lupinus

Senecio

Antennaria

Achillea

Linum

Castilleja

326 Lycopodium obscurum

July 25.

NOTE - Almost no bark in the forests at this NW quarter of 326

IN NW 198 Stipa Spartea in cooler heads [illegible]

329. Bryoria [illegible] from Pinus [illegible]

330 Moss from Rim Rock at [illegible]

(5) Rimrock [illegible]

Gaillardia [illegible]

Senecio [illegible]

Calamagrostis [illegible]

11. Upper slope woods of [illegible]

331

Found nugget at 3p
[illegible] on sw side
of range.
Sierra Gun High

July 26

W. Hill of [illegible]

335 Potentilla from crevice on rock.

336 [illegible] canal from lower [illegible] side of [illegible]

[illegible]

North Mt. N. Side

338 Fern from Cave ent

338½ Liverwort

7/31/67

Indirect A. Found 1

Additional Herbs.

Rosa acicularis.
Cladr.

Stipa & Poa spinosa

Trans. A. Found 3
340. Veron. sp. adult.

Trans A. Found 4.
341 Agrypnus - ad Click sp.
nymphs.

Trans. A found 5.
~~Scolytus~~ Dendroctonus intermedius
~~Agrilus alba~~
&
Agrilus acutus
Cicada sp.

Trans. A found 6.
342 Agallia sp.
~~343~~ Leafhopper sp.
347 Elaphidion.

Large tick post A-7-2

11.13 Much of surface covered
can be complete Mud to rub.
Lyngbyites

A 8
343 Aggregate single stem from
number 2 rub in
Clumps

A 9.
344. Glypsum sp

A 10.
345 Dawsonia splatt
346 Nice sedge —
347 Dry herbs

A-12
348 Calastrus scandens.
IN OAK TREE.

7

Trans B.

1. 349 Potentilla
350 Stipa

Trans B. 4.
351 Riverbank grass hairy leaves
352 Large sedge

From NPAR Trans B-4 on Stream bank

353 Grass.
354 Grass.
355. Hieracium pentagyna

Trans B. 5.
356 Roadside weed
357 Ribes Gooseberry

NPAR STAS on STREAM
358 Willow.

B. Sta. 2.
359 Juliana Scelifolia.
360 Haloragis

C. 3.
361 Solidago gigantea

© H.
362. Grass

(12) THICKET

Corylus Am
Betula Alc
Assoc Green Ash
& Maple.
Swamp Etc.
Choke Cherry

(13) Green Ash Common with
Oak at this loc
And on S. many
of Sange.
Corylus Thickets
Apple woods
on Hp.

Bolet[illegible] Oak

Olsen V Creative Spindle
blocks against [illegible]
[illegible]

Soil Sample.

A Hor.

Top Brownish black silty
Samp. 1 A hor. soil with roots of
small shrubs, small stones
Sample 1 from A Horiz.
~~2.5~~ .25 ft
Samp 2 base A - .25 ft
-1.2
B Hor. Tannish from
~~Brownish silty soil and~~
small oil" stones.
Samp 4-10 roots.
-1.5

1,6 C Hor. Tannish mottled
grayish rocks (rounded)
from 1½ to 5".
Samp 3 1.3½

Soil Sample A-6

Top of P.1.

A0 BLACK to dark grey Sandy Loam. Sample 1 of A6 1 0-.05'

A1 .05-1' light grey SILTY Soil. Sample 2 .4-.5'

A6 Brownish grey SILTY Sand WITH rounded rocks 1/2" TO 1" Samp A6 3 .8

Aug 8, 1967

363 Driveway in Dickinson
behind Mrs K's

Aug 10, 1967

6729. Center Sec 2, T 44N, R 96W.

USNM 14161

-43°

In Coaly Shales of Wasatch
100 feet above Valley
Floor
Salvinia ~~leaves~~
Dicots.
Equisetum.
Sapindus affinis
Metasequoia occ.
Typha.
Sparganium antiquum (seed)

364 Agropyron w/ rhizomes
365 S. fragilis (?) leaf.

6729 fl. from 4 cone
75' below Top
of Sequoia Butte.

Aug 11, 1967

6750 | S side of N BUTTE

366 | PEA - 45 MM, Fe, UC X ?
in Shard on
[illegible]

367 | few CRACK IN RimBack

Aug. 11.

.731 MX Loc 4.

ON Section 21 of Sharp McKay, McKeown, & White (1964) - IN "WASATCH" Fm. 500 IN ~~TX~~ paper shales & Carb shale sequence assoc with lignites 500-520' feet below ~~top of~~ top of South Middle Butte IN NW¼ SW¼, SW¼ Sec. 9 T. 43 N R 75 W, Campbell Co Wyoming.

Age. Early Eocene ??
Fm. WASATCH ?

Lack of Any Salvinia preaurinda
Indic NOT Eocene
Prob LATE PALEO

1732.	Smethport Pa. Refinery of QUAKER STATE Oil Co. Samp. of P.A Crude oil.

10/17/67

Petrified Log. from Arlington VA

6733 - Petrified Log samples.

Workers say a rounded

Center of Log Black.

Donald McNary.
422 West Braddock Rd
Alex.

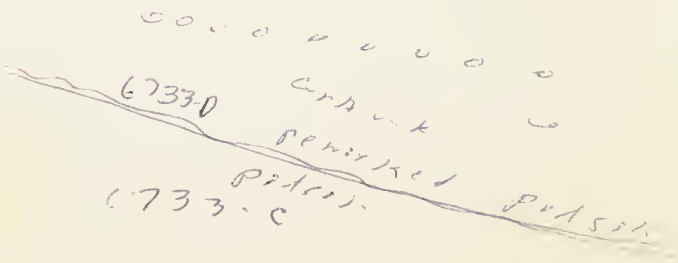
7 Gravel depth top of Hill at least 20' Thick
Base contains other silicates coal

6733 A Gravel from the hill
6733 B Rotten silicate rock abt 9' below top of Hill.

Gravel cont with rootlets
w/ spec-
imens on L

6733-C Schistose podsolized
rx below

GRAVEL.
JOINTS filled with limonite.
1' below contact



6733-D Reworked podsol from
1½' above contact

Geology of Hebron member

Few pages

Showing variation
laterally

Why?

Types of strata
which form us
Clay

from Barre
Type Sec.
Hebron sitting

Sections

Graphic portion

Munsell colors.

brief des. right beside
col.

Sec. 27

Frank Seitz
333 1ST East
Dickinson, N.D.

Figueroa 104 75
9 10

Pinto 1.50
15.

4 50
7 50
24 00
8 00
44.00

45.00

Oscar wants another map